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09/942,173	08/30/2001	Tsutomu Yamazaki	011350-284	6797

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EXAMINER	
LAROSE, COLIN M	
ART UNIT	**PAPER NUMBER**
2623	4

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/942,173	YAMAZAKI, TSUTOMU	
	Examiner	Art Unit	
	Colin M. LaRose	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-26 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-6, 9-19 and 22-26 is/are rejected.

7)☒ Claim(s) 7,8,20 and 21 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 7 and 8 are objected to because of the following informalities:

It appears that "said adjusting color calculating means" should be -- said color adjusting means -- so that it corresponds to the language of claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 14-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Computer programs per se are non-statutory. The computer program must be embodied in a storage device, which contains instructions to execute the steps of the program. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 6, 9, 10, 14-17, 19, 22, and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Translation of Japanese Patent 01-025285A by Honda ("Translation").

Regarding claims 1, 14, and 24, Translation discloses an image processing device/method/program (figure 2) comprising:

a first color detection means for detecting colors of a first image data by each processing unit (bitmap memory 3 detects the values ("colors") of the pixels ("processing units") generated by the character generator 31);

a second color detection means for detecting colors of a second image data that serves as the first image data's background by each processing unit (image display memory 1 detects the values ("colors") of the pixels ("processing units") generated by the image input unit 10); and

a color adjusting means (overlay pixel determination circuit 2) for specifying a uniform adjusting color that makes the first image data recognizable against all colors of the second image data that serves as the first image data's background, concerning the first image data that have approximately equal colors (page 9 of Translation: circuit 23 determines the color values of the first image that is easiest to view when superimposed on a given background, or second image; page 10 of Translation: "a character scheduled to be overlaid and displayed is automatically colored in such a way that its "viewability" will be maximized in relation to the average density of a certain region designated for the overlay").

Regarding claims 2, 15, and 25, Translation discloses an image processing device/method/program as claimed in claims 1, 14, and 24, further comprising: an image synthesizing means for synthesizing the first image data converted into said adjusting color with said second image data (overlap control circuit 63).

Regarding claims 3, 16, and 26, Translation discloses an image processing device/method/program as claimed in claims 1, 14, and 24, wherein said processing unit is a pixel (see the explanation for claim 1).

Regarding claims 4 and 17, Translation discloses an image processing device/program as claimed in claims 1 and 14, further comprising:

a first memory means (3) for storing the colors of the first image data by each of the approximately equal colors; and

a second memory means (1) for storing the colors of the second image data that serves as the first image data's background said colors of which are correlated to each of the corresponding colors of the first image data that are stored in said first memory means;

wherein said color adjusting means includes an average color value calculating means for calculating an average value of all the colors of the second image data correlated to each of the colors of the first image data (page 5 of Translation: "overlay pixel value determination circuit ... computes the average pixel value (density value) of a certain region [of the background image]"), and an adjusting color calculating means for calculating said adjusting color for each of the colors of the first image data based on each of the colors of the first image data and the average color value of the second image data calculated in correspondence with each of the colors of the first image data (page 5 of Translation: "overlay pixel value determination circuit ... determines the optimal overlay pixel value specific to [the average] density value" – i.e. it determines the optimal color of the characters of the first image based on the average density value of the background and the values of the first image data, which determine which pixels to be colored as such).

Regarding claims 6 and 19, Translation discloses an image processing device/program as claimed in claims 4 and 17, wherein said average color value calculating means calculates the average value of the coordinate values of the colors of the second image data in a specified color system (page 5 of Translation: "overlay pixel value determination circuit ... computes the average pixel value (density value) of a certain region [of the background image]" – this computation is done in the RGB color system).

Regarding claims 9 and 22, Translation discloses an image processing device/program as claimed in claims 1 and 14, wherein said first image data is an image data that represents character images (character generator 31 generates character images).

Regarding claim 10, Translation discloses an image processing device as claimed in claim 1, further comprising: a third memory means for storing said second image data (image display memory 1).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Translation in view of U.S. Patent 5,930,385 by Fujimoto et al. ("Fujimoto").

Regarding claims 5 and 18, Translation is silent to a judging means for judging that colors of the first image data are approximately equal when a sum of squares of the differences of their coordinate values in a specified color system is less than a specified value.

Fujimoto discloses an image processing system adapted to perform a color conversion on an input image, such as converting a color image to a monochrome image. Figure 2 shows a method for such conversion. Figure 3 shows the process of region dividing, which is included in the method of figure 2. In dividing the image into color regions, it is determined whether adjacent pixels have the same color at step 2-3. As figure 8 shows, determining whether two colors are the same involves determining whether the sum of squares of a difference in color values is less than a threshold.

It would have been obvious to modify Translation by Fujimoto to include means to judge the similarity of input character colors, as claimed, since Fujimoto discloses that generating monochrome input characters (such as taught by Translation by element 31 in figure 2) involves judging the similarity of colors based on the sum of squares of the differences of coordinate values in relation to a threshold.

7. Claims 11-13 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Translation in view of U.S. Patent 5,872,573 by Adegeest.

Regarding claims 11 and 23, Translation is silent to a file preparing unit for preparing an electronic file based on the image data synthesized by said image synthesizing means.

Adegeest discloses a system for producing legible text to be overlaid on a background, similar to that of translation. In particular, Adegeest discloses that it is conventional to compile

an output image in a file and store the file on a storage device such as a hard disk 46, floppy disk 47, or CD-ROM 28, figure 1.

It would have been obvious to modify Translation by Adegeest to prepare an electronic file of the synthesized image as claimed, since Adegeest shows that it is conventional to store output images in a file on a storage device for future retrieval.

Regarding claim 12, Translation discloses an input device 10, but does not expressly disclose the image device is a scanner, as claimed.

Adegeest discloses a system for producing legible text to be overlaid on a background, similar to that of translation. In particular, Adegeest discloses that it is conventional to obtain input images via a scanner.

It would have been obvious to modify Translation by Adegeest to input the second image via a scanner, as claimed, since Adegeest shows that it is conventional to input images with a scanner.

Regarding claim 13, Translation is silent to a printer unit for printing images on recording media based on the image data synthesized by said image synthesizing means.

Adegeest discloses a system for producing legible text to be overlaid on a background, similar to that of translation. In particular, Adegeest discloses that it is conventional to output processed images via a printer 23, fiure 1.

It would have been obvious to modify Translation by Adegeest to output the synthesized image via a scanner, as claimed, since Adegeest shows that it is conventional to output images using a printer.

Allowable Subject Matter

8. Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 20 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and if claim 14 is rewritten to overcome the above rejection under 35 U.S.C. § 101.

Regarding claims 7 and 20, Translation does not disclose that the color adjusting means uses the claimed formulas for producing an output color value. Rather, Translation's color adjusting means (2, figure 2) compiles an histogram and determines the adjusted color from the histogram data.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,585,822 by Nishikawa

U.S. Patent 5,721,792 by Thompson

U.S. Patent 5,467,109 by Nagaoka

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colin M. LaRose whose telephone number is (703) 306-3489. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au, can be reached on (703) 308-6604. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600 Customer Service Office whose telephone number is (703) 306-0377.

CML
Group Art Unit 2623
8 October 2004